

**Amendments to the Specification:**

Please replace the paragraph beginning at page 5, line 18, with the following rewritten paragraph:

-- As shown in the exemplary spintronic device **200** of **Figure 2**, an injection contact **208** and a detection contact **210** are each positioned on a thin layer of silicide **206** overlying a silicon substrate **202**. The thin ~~insulating~~ layer of silicide ~~can act as a thin insulating barrier in order to serve as a tunneling junction for~~ allows for the injection of spin-polarized carriers into the silicon substrate without significant loss of spin polarization. The silicon substrate can have a layer of carrier material **204**, such as for example an n-well in a p-substrate as is known in the art. The injection and detection contacts **208**, **210** can be made of a ferromagnetic metal, such as cobalt, nickel, or iron, and in this example have a common spin polarization that is parallel to the surface of the silicon substrate. The magnetization of each contact **208**, **210** can depend on the thickness of the contact, as the crystal structure of the contact can provide for ferromagnetic spin orientation during deposition, for example. An external magnetic field also can be applied to each contact in order to program the spin orientation of that contact. In another embodiment, at least one additional metal layer can be used to provide for proper contact anisotropy. Each additional metal layer can be a thin film of a diamagnetic or antiferromagnetic metal, such as for example a layer of ruthenium (Ru). The additional layer(s) can be placed between the contact and the silicide layer, and/or on top of the contact, in order to provide for the proper spin orientation in the contact.--